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DERMATOLOGICAL NOTES.

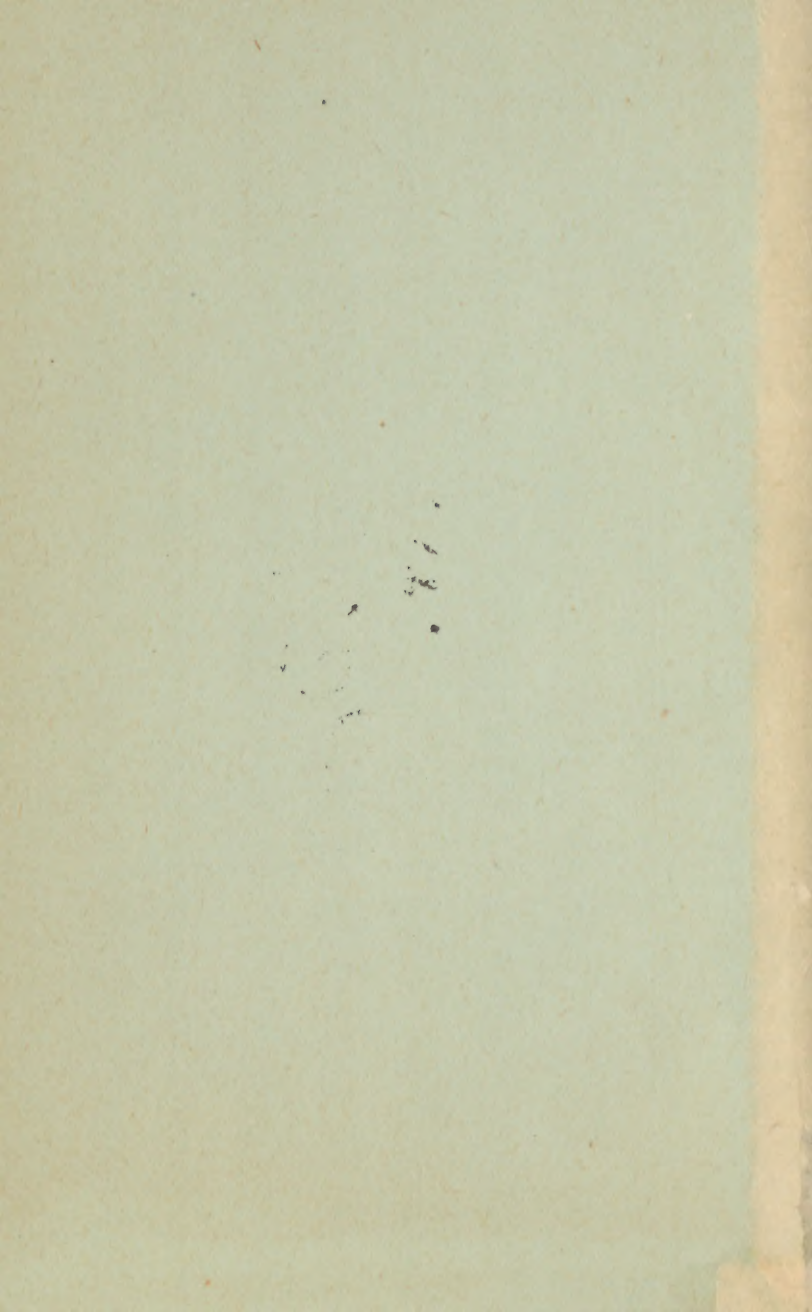
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DERMATOLOGICAL NOTES.

IODIDE OF AMMONIA ERUPTION.

(FRONTISPIECE.)

IODIDE POTASH ERUPTION.

COPAIBA ERUPTION.

ALOPECIA: ITS ETIOLOGY, DIAGNOSIS, AND TREATMENT.

ETIOLOGY AND TREATMENT OF ACNE VULGARIS.

TREATMENT OF TRICHOPHYTOSIS CAPITIS.

ELECTROLYSIS IN THE TREATMENT OF DISEASES OF THE SKIN.

TREATMENT OF EPITHELIAL CANCER.

THE INFLUENCE OF SYPHILIS UPON NON-SYPHILITIC ERUPTIONS OF THE SKIN.

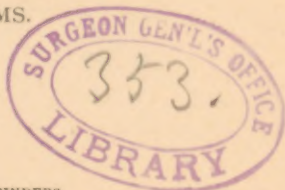
MERCURY IN THE TREATMENT OF SYPHILIS.

SALICYLIC ACID IN CUTANEOUS DISEASES.

DERMATOSES PRODUCED BY DYE STUFFS.

THE CARE OF THE SKIN.

NEGATIVE APHORISMS.



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INTRODUCTION.

THESE notes on Dermatology and Syphilography have been read, within the last three years, before the different Medical Societies in the State of Kentucky.

Since their original publication some of the articles have been re-written; others abbreviated. They are not intended as a complete résumé of the subjects of which they treat, but rather as suggestions for more extended study, with a report of cases as occurring in the individual practice of the author.

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INTRODUCTION

These notes on the history and progress of geography have been written during the last thirty years, but in the different historical periods in the time of geography.

Since their original publication more than 50 articles have been written on the history of geography. These are not intended as a complete account of the subjects of which they treat, but rather as a guide to the literature of the subject, and a record of the progress of the subject.

THE HISTORY OF GEOGRAPHY

Geography has been a subject of interest to man from the earliest times. The first records of geographical knowledge are to be found in the writings of the ancient Greeks. The history of geography is a subject of great interest and importance, and it is one which has attracted the attention of many of the greatest minds of the world. The history of geography is a subject which has been the subject of many of the greatest minds of the world. The history of geography is a subject which has been the subject of many of the greatest minds of the world.

Iodide of Ammonia Eruption.*

THE fact that the ingestion of certain medicines may produce eruptions of the skin has been long known to physicians, but only recently has the attention of the general practitioner been especially called to their occurrence. There is hardly a drug known that is not capable of producing an irritation of the skin by its internal administration. The subject has recently been most forcibly called to the notice of the profession by the exhaustive treatise on "Drug Eruptions" by Prof. Prince A. Morrow. He says: "Comparatively few cases of bullous eruptions, caused by the ingestion of iodide of potash, are found recorded in the literature of drug eruptions, and it may therefore be classed among the rarer manifestations of the drug." Though iodide of ammonia is more liable to cause irritation of the skin than any other preparation of iodine, I have not seen a case of bullous eruption reported from its ingestion. Therefore, the report of the following case may be of particular interest: February 22, 1888, I was called in consultation by Dr. Hunt Stucky, of Louisville, Ky., who gave me the following history of the case: "Mr. R——, age 51, was employed in storing lumber from a sweat-box. On 1st of October, 1887, he left for his home, some distance away, while his clothing was saturated with perspiration. Soon after reaching home he had a severe chill, followed by fever. The following morning he complained of a pain in his chest and difficulty in breathing. Diagnosis,

* Reprint from the *Journal of Cutaneous and Genito-Urinary Diseases*, May, 1888.

broncho-pneumonia." On January 27, 1888, Dr. Stucky first saw the case. He then found "the affected side somewhat contracted; respiration, accelerated; expectoration, muco-purulent; complete absence of true vesicular breathing; pulse, 120; temperature, 102°. Ordered quinine, whiskey, and the following tonic:

R	Hydrarg. Bichloride	gr. i
	Ammonia Iodide	3 ss
	Sarsaparilla	3 ii
	Elix. Malt. aromat. ad.	3 iii

"Dose, two teaspoonsful after meals. After taking several doses—about twenty grains of iodide of ammonia—a vesicular eruption appeared on the scalp, face, and shoulders; mixture discontinued. In a few days the vesicles disappeared. About two weeks later the tonic was again given in one teaspoonful dose after meals. After four doses—about five grains of the iodide—had been taken the eruption reappeared, and attained its maximum development in ten days after the drug was discontinued."

February 22, I was called in consultation and found an eruption, consisting of vesicles and bullæ, situated on the scalp, face, trunk, thighs, and legs. The lesions on the scalp and face varied in size from a split pea to a pigeon's egg. Those that had not broken were markedly umbilicated, of steel color, and surrounded with a slight areola. On the left side of the scalp several bullæ had coalesced, broken down, and were discharging bloody serum. From the groin to the ankle various sized bullæ were situated. On the outer side of the left thigh several had coalesced and were covered with bloody crusts. The umbilication and indurated

edges are very well shown in the photograph taken at this time. On the calves many bullæ had broken, presenting a raw-beef-looking surface and elevated edges; both feet and ankles very much swollen, and pitted on pressure. The lesions on the back presented very much the same appearance as those described elsewhere. The skin was neither infiltrated nor reddened between the lesions, except on the face and scalp. There was no eruption on the hands, feet, or abdomen; mucous membrane unaffected. No subjective sensations.

Patient was listless, drowsy, and would fall off to sleep almost instantly after being awakened. Ordered whiskey, cod-liver oil; lesion to be opened and dressed with carbolized vaseline. Four days later, that is, February 26, some new lesions had appeared. Many bullæ had become confluent, especially about the scalp, covered with dark crusts. Many were discharging a thicker sanguineous pus than when last seen. Examination of urine found acid in reaction—sp. gr. 1022—with only a trace of albumen. The lesions on the back, thighs, and legs had increased considerably in size; ulcerating surfaces situated, apparently, a little below the surface of the surrounding skin, from the fact that their periphery was elevated and hardened. Odor very offensive; no new lesions appeared after this—ten days after the medicine was discontinued—the raw-beef-looking surfaces gradually healing, especially on face and scalp.

March 7. Lesions on the face on a level with the surrounding skin very much improved in appearance. Ulcers on the legs bathed in thick pus; extremely fetid odor. Patient failing; pulse cannot be counted; respiration, 34. Died on the night of March 7 from apnoea.

The two photographs of the face and scalp are partic-

ularly interesting, as they show how greatly the lesions had increased in size in four days, from February 22 to February 26; the white spots observed in the last picture were caused by the dressing of vaseline reflecting the light particularly at these points. The photograph of the leg shows the lesions plainer, as the proof was from a clearer negative. Though it has been suggested that the eruption in this case might be a manifestation of syphilis, there is no doubt in my mind it was directly due to the iodide of ammonia, for the following reasons: The appearance of the eruption within four days after taking the drug; that it faded away after its discontinuance; its reappearance after five grains more had been taken, and its gradual fading away the second time after reaching its maximum development on the tenth day; its resemblance to other bullous eruptions reported as due to the ingestion of preparations of iodine, and from the fact that there was no other known cause for the eruption. The patient and his wife positively denied that he had ever had an eruption of any kind before; there was absolutely no history of syphilis, the only disease it at all resembled in appearance. But it could not be due to this disease, since a vesicular eruption is a most uncommon manifestation of syphilis; when it does occur the vesicles are not so extensive in their distribution; they are not so markedly umbilicated: there are no dark bloody crusts from these lesions, and other lesions, such as papules, are usually present. Then it is to be remembered that vesicles appeared in this case, quickly increased in size till they became bullæ the size of a pigeon's egg, the contents, at first bloody serum, soon changed to sanguineous pus, drying up and beginning to fade away all within ten days; this is not the history of an eruption due to syphilis.

Iodide Potash Eruptions.*

Among the valuable papers on drug eruptions written by Professor Prince A. Morrow, are several on the bullous form of iodic eruptions. The last case reported by this author (*Journal Cutaneous and Venereal Diseases*, 1886) is accompanied by an excellent colored plate. I can testify to the correctness of the likeness, as I saw this patient at Charity Hospital, New York, through the courtesy of Dr. Morrow. Of the last nine of these cases reported, four have proven fatal. At the last meeting of the Medico-Chirurgical Society of this city, I reported a case of iodide potash eruption in a woman about thirty years of age, who was being treated for syphilis. When I first saw her, there was a profuse vesicular rash about the lower part of the abdomen, the right groin, and extending down the thighs to the knee. On the outside of the thigh the vesicles had broken, exposing the corium, so the part looked like a piece of raw beef. A few isolated vesicles were situated about the cheek and arms. She had been taking ten grains of the iodide potash three times a day for eleven days. The diagnosis was made from the fact that syphilis seldom produces a vesicular eruption. It was unlike any other form of simple eruption, and because the rash began a few days after beginning the use of the drug, to completely disappear ten days after discontinuing its administration. It is a well-known fact these eruptions do not depend upon the amount of the drug that may be taken; five grains may cause it as well as five hundred. It is, without doubt, due to an idiosyncrasy of the individual.

* Reprint from the *South-Western Medical Gazette*, March, 1887.

Case of Copaiba Eruption.*

THE following case of generalized eruption from the ingestion of copaiba came under my observation recently. Dr. Cartledge, of Louisville, Kentucky, called me in consultation to see a patient suffering with a peculiar eruption. The patient, a florist, 28 years of age, unmarried, presented himself at the doctor's office, September 1, with an acute attack of gonorrhœa. He was advised to take a dessert-spoonful of the following mixture every four hours :

℞ Balsam Copaibæ	
Spts. Ætheris Nitrosiæ āā	℥ i
Liquor. Potass.	℥ iss
Sacchari	gr. xx
Mucilag. Acaciæ	℥ iss
Spt. Lavandulæ q. s. ad.	℥ iv

Enlarged inguinal glands were painted with tinct. iodine. Patient did well till September 5, when an eruption made its appearance, extending from the surface that had been painted with the iodine down the thighs. There was, at this time, some febrile disturbance and nausea; the gonorrhœal discharge stopped. Two days later, when I first saw the patient, the whole surface of the skin was covered with a bluish-red erythematous rash; the only portions not affected were a few isolated circular spots of normal-colored skin about the size of a fifty-cent piece, situated about the thighs and abdomen. The eruption ended abruptly at the margin of these spots. There were no subjective symptoms. On the fourth day after discontinuing the copaiba mixture the dermatitis

* Reprinted from the *Journal of Cutaneous and Genito-Urinary Diseases*, March, 1887.

had entirely disappeared; temperature normal; the urethral discharge again made its appearance. The case is an interesting one from the fact of the absence of subjective symptoms, the amount of surface involved in the eruption, and the peculiar isolated spots of perfectly natural skin.

Alopecia: Its Etiology, Diagnosis, and Treatment.*

By alopecia we mean a partial or complete loss of hair, irrespective of cause. Although the varieties of the disorder have been designated by many different terms; in this paper I shall refer only to the following:

Congenital, senile, premature syphilitic, and alopecia areata.

The congenital form is rare; especially so are cases characterized by a total absence of hair. Coincidentally with this condition there may be an imperfect development of teeth; Danz has reported two cases of adult persons who never had either hair or teeth. If there is a total absence of hair bulbs of course the condition will continue through life; but in other cases the hairs may appear after a time. So-called senile alopecia is generally the result of hereditary peculiarities; in some persons changes indicative of this condition are manifest at an early age; before baldness occurs the hairs usually turn gray, become dry and thin, and are then either rapidly or slowly cast off. The causes of premature alopecia are numerous. It is either due to disorders which act

* Read before the Louisville Medical Society, April 22, 1896. Reprint from the *American Practitioner and News*.

locally upon the skin, as seborrhœa, psoriasis, eczema, acne, and the parasitic diseases, or to constitutional diseases which cause a general debility of the system and so diminish the activity of the circulation of the scalp; for example, the loss of hair that follows the severe fevers or nervous disorders. Holmes' System of Surgery cites several cases in which loss of hair followed the shock produced by lightning. It is said, also, to follow upon long-continued attacks of migraine. Though the textbooks do not refer to acne as an exciting cause, I have several times seen localized spots of baldness about the face in young men who had suffered from the severe forms of this disease. The loss of hair in such cases is of course permanent, as the cicatricial depressions that continue after the cure of acne involves the hair bulbs. Dr. Lassar believes that baldness may be spread by hair-dressers who use the same comb and brush on several persons; as an experiment, he collected the hairs that fell from the heads in which dandruff was plentiful, and rubbed them up with vaseline; the ointment thus made he applied to the fur of rabbits, whereupon, it is said, baldness appeared and made rapid progress; vaseline produced no such effect. In this connection it is interesting to note that the parasitic nature of dandruff is not accepted by the great majority of dermatologists. Loss of hair may occur at two periods during the course of syphilis; it is one of the most common symptoms of the disease during the secondary stage, generally beginning about the third month, or later, as a result of ulceration. It is said that loss of hair never occurs elsewhere on the body in this disease without affecting the scalp also; but I have seen one case in which there was simply loss of the eyebrows, and another in which part of the beard

fell out, the scalp not being affected. In these cases syphilis was the only discernible cause of the disorder. The prognosis is good in this form of alopecia, unless it result from ulcerative lesions.

In treating premature and syphilitic alopecia, our aim should be to remove the cause when possible, to correct faulty constitutional conditions, and locally to stimulate the vascular supply of the bulbs, and so improve the nutrition of the hairs. Piffard says it is very doubtful if there are any drugs that, internally administered, will directly promote the growth of hair. Arsenic and phosphorus have been recommended for this purpose. In the majority of cases our main reliance must be local treatment, and the same class of medicines are recommended here as in alopecia areata. If the scalp is unusually dry, oily applications are best; but if there is an excess of sebaceous secretion, lotions containing alcohol are to be preferred. Those cases dependent upon seborrhea, the alopecia furfuracea of Hebra, are best treated by the method recommended by that author, namely: removal of the scales by means of olive oil, washing the scalp with soft soap and alcohol, and, at a later stage, the application of lotions containing stimulating ingredients.

The numerous controversies regarding the etiology of alopecia areata have given especial interest to this form of baldness. Some dermatologists maintain that the disease is parasitic, while the great majority deny the statement. Gruby, in 1843, was the first to declare that the disease was due to a parasite, which he called *microsporon Audouini*. Thin, in 1881, described another fungus under the name of *bacterium decalvans*. The synonyms for alopecia areata are numerous. Willan called it *porrigo decalvans* or *alopecia circumscripta*; Bate-

man, *tinea decalvans*; Bazin, *tinea achromatosa*. At the present time the parasitic nature of the disease is not allowed by far the greater number of our best authorities; of the forty-one observers whose writings were consulted by Dr. G. T. Jackson, of New York, fifteen affirmed it was parasitic, while twenty-six declared it was not. Hutchinson was the first to show that alopecia areata occurred most frequently in persons with a weakened constitution. It is now generally regarded as due to peculiar nervous disturbances which result in impaired nutrition of the skin. Its appearance among the 14,000 cases of skin disease reported by the American Dermatological Association is comparatively rare, the number being 112, or about two per cent.

The course of the disease is variable; though generally occurring suddenly, it may be several weeks before a perfectly bald patch is visible. The patches are circular in shape, smooth and shiny, sharply defined, and paler than the surrounding skin. They may coalesce till complete baldness results. I have seen one such case. At times the disease is not confined to the scalp, but may show itself upon other parts. I have treated a man who had lost nearly all the hair from his head and both eyebrows. In this case the hair began to grow again in five or six months under the use of electricity and the sulphur ointment.

Subjective symptoms are usually absent in this affection, but there may be some itching. The diagnosis is not difficult if the main features of the disease be kept in mind. The patches are usually unmistakable. In *tinea tonsurans* the skin is darker in color, having a grayish-blue tinge; the hairs are not all absent, those remaining are broken off, and the disease may spread to non-hairy

parts of the skin. When still in doubt the microscope will settle the question. Alopecia is also to be distinguished from favus. In this disease we have the characteristic yellow crusts in the early stage, and later, cicatricial tissue. Premature and senile alopecia may be distinguished by thin hairs, slow development, and the previous history of the case. In the syphilitic variety the patch has no tendency to assume the circular form; it usually occurs at a later age, and the surface is dry and scaly.

Prognosis is good in the young, but becomes less favorable as age advances; the hairs may return in a few months, or they may not appear for years.

Those who believe in the neurotic origin of the disease recommend both constitutional and local treatment. Hebra, though accepting this theory, does not speak of constitutional treatment. Duhring regards internal treatment as of the greatest value. Most observers recommend either arsenic, phosphorus, nux vomica, or iron. Of these drugs, Wilson holds arsenic to be the most important. In spite of Kaposi's statement that remedies have little or no effect on the disease, a vast number of external remedies have been highly recommended by different authors. The very fact that so many have been advised would tend to show that this eminent authority is right in his conclusions, and that few drugs have any power in hastening a cure. Riendfleisch speaks of the rapid improvement following the use of equal parts of tinc. capsicum and glycerine. Good results are said to frequently follow the use of electricity; in a case reported by Dr. G. H. Fox, the hairs made their appearance in a week after the beginning of this treatment. Pincus believes that he has demonstrated the favorable influence

of sodium chloride on the growth of hair. Sulphur in the form of ointment is also highly recommended. Unna says that all cases are greatly improved by it in a short time, and completely cured under its long-continued use.

Chrysarobin is well spoken of by Hutchinson. I have seen the hairs begin to grow in a short time after blistering the scalp with croton oil. I use a mixture of two parts of white wax and cocoa butter to one of the oil, in stick form. Such stimulants as tinc. capsicum, tinc. cantharides, and liq. ammoniæ are frequently recommended in combination, but, as Jackson says, there is no good reason for combining these remedies; since our object is simply to stimulate the hair bulbs. I believe that electricity promises the best results; in my own practice it has proved very serviceable. Hebra recommends the use of soft soap and the sulphur ointment.

The Etiology and Treatment of Acne Vulgaris.*

(Read before the Medico-Chirurgical Society of Louisville, Ky).

NOTWITHSTANDING the majority of physicians speak and think of acne as an affliction of altogether minor importance, the number of persons between the ages of thirteen and twenty who altogether escape some one of its manifold annoyances is very small. Of all skin diseases there are fewer that cause greater disfigurement or, in many instances, give livelier mental distress to the sufferer. Some years since a man twenty-five years of age, the subject of the severest form of acne for twelve years,

* Reprint from *The American Practitioner and News*.

came under my care. His former physicians had assured him that time alone could affect a cure, and advised simply that he let his face alone, make no attempt to "drive in" the disease; abandon the use of soap in washing; and on no account touch tobacco in any form.

Between the suffering from the disease and the advice he had grown to be so wretched that he seriously contemplated suicide. After two months of suitable treatment the acne was cured, but unfortunately the disease had lasted long enough to mark the patient's face with scars as disfiguring as those following small-pox. The subjective symptoms of the disease being less annoying than those in eczema, we meet with a fewer number of cases; but there is no doubt if the lighter forms came under our notice it would be found to occur just as frequently as eczema.

In 14,007 cases of skin diseases reported in 1885, acne occurred in eight per cent. In 500 cases observed by myself there was nine per cent. The oldest patient that came under my notice was a woman twenty-eight years of age. She stated her complexion had been perfectly clear till two years previously, when she began to suffer from constipation, dyspepsia, and irregular menstruation, soon after which the eruption appeared. In two cases the cause was traced to the internal use of iodide of potash. In one of these even a fraction of a grain caused an eruption; in another, the rash was excited by a mixture containing bromide of potash. In both these cases the disease soon disappeared without treatment after the drugs were discontinued. I believe, in the great majority of cases, acne is a reflex affection, dependent upon the disturbance of some internal organ, and not a primary disease of the skin itself. Derangement of the digestive system is an important factor.

Other causes are general debility, anæmia, menstrual irregularities, etc. ; but I cannot endorse the opinion of those who consider sexual excitement a cause, for the reason I can recall many cases in which patients have confessed to excessive venery and masturbation extending over a period of years, and yet there was no sign of inflammation of the sebaceous glands. In other cases, where there was every reason to suppose sexual excitement did not exist in an abnormal degree, and yet acne existed in its worst form. As Hebra says: "The circumstance that acne appears most often about puberty, when certain changes in the system accompany sexual development, was probably the origin of the opinion that a certain alternation exists between the evolution of acne and the exercise of the generative functions; but the results of unprejudiced observation do not support this view."

In the treatment of the disease the constitutional condition of the patient should demand our first attention, for unless this be thoroughly made out and its defects fully mastered it will seldom be possible to accomplish a cure; at the same time it must be remembered there is no specific for this or any other cutaneous disease. The cause should first be sought for and means suited for its removal at once adopted. Tonics are suitable in the great majority of cases; arsenic in small doses, in the chronic non-inflammatory forms of the disease, is of unquestioned benefit. Piffards refers to three cases of pustular acne cured by bromide of arsenic given in minute doses. The sulphide of calcium has also been highly praised as a remedy in these cases, but in my own practice I have not found it of any appreciable benefit. In acne, as well as in other cutaneous diseases, great benefit results from re-

lieving the disordered skin of its work by securing free action of the kidneys. In several cases of acne, accompanied by stricture, I have employed the introduction of sounds into the urethra, as recommended by Dr. Denzlow, but seemingly without benefit. The diet should be regulated; hot bread, melted butter, candy, pastry, and stimulants in all forms should be avoided. Patients have informed me that they "could bring out a crop of pimples" by eating anything sour.

Local treatment is most important, and though the constitutional condition of the patient should be looked after, it is impossible to cure the majority of cases without it; the glands should be relieved by mechanical means of the hardened sebaceous matter which distends them and acts as an irritant; this is best accomplished with an instrument devised by Dr. Pitfield. The curette has been recommended for breaking down all the lesions; this leaves the parts in apparently much worse condition and is painful, but when the patient sees the amount of good that it effects they willingly submit to it. After opening all the pustules, removing the comedones, the face should be bathed in as hot water as the patient can stand; this is to be repeated several times a day. As soon as the inflammation has subsided we must make use of *saponis viridis*; this is to be rubbed thoroughly on the face, by means of moist flannel, washed off, and a mild sulphur ointment applied, to remain on during the night; after several days of this treatment the skin will feel tense and have a glistening appearance; the application should then be stopped and stronger sulphur ointment employed. Ointments are best while the skin is abnormally dry, but in those cases accompanied by *seborrhœa oleosa* lotions are preferable, such as that recommended by Kaposi:

R	Sulphur præcip.	. . . . .	3 iiss
	Spt. Vini Rect.	. . . . .	3 iss
	Spt. Lavendulæ	. . . . .	3 iiss
	Glycerine	. . . . .	Gtt. xx

M. Sig. Spread on the face and retain during the night.

Or the following, advised by Hyde :

R	Tinc. Benzoin.	
	Glycerine āā	. . . . . 3 i
	Aquæ	. . . . . 3 iv
	Aquæ Cologn.	. . . . . 3 i

Bi-chloride of mercury will do good in some cases ; it may be used in the form of a lotion, half to two grains to the ounce. It is well to continue the use of some mildly stimulating lotion after the disease is cured, such as half a drachm of tinc. benzoin to the ounce of rose-water.

Treatment of Trichosphytosis Capitis.*

(Read before the Louisville Medico-Chirurgical Society, August 27, 1886).

SUCH a vast number of external remedies have been advised for the cure of this disease that even mention of the different plans of treatment so highly extolled by writers in dermatology would be impossible in a brief article such as this. In most cases the disease resists treatment most annoyingly, and persists for a long period. It is my purpose in this paper to report several cases, with the result of treatment in each. As the dis-

* Reprint from *American Practitioner and News*, July, 1886.

case results from a parasite (the trichyton fungus) that makes its home in the hair follicles and hair itself, it is evident our chief aim in treatment is to destroy this fungus and allay any irritation that it may have caused. The application of parasitocides alone are not all that is required, but it is absolutely necessary to resort to epilation in the great majority of cases. As many hairs as possible are to be removed at each sitting, followed by the parasiticide. To test the efficiency of the different remedies advised, I have tried a variety of methods in the last few cases which have come under my observation. In five cases, tar and iodine, in the form of Coster's paste, was first used. This was applied every five days. In two weeks two of these cases were pronounced cured. In the remaining three cases bi-chloride of mercury in alcohol, one grain to the ounce, was substituted. One of these was cured within one week. The remaining two cases were then treated with chrysarobin pigment, and cured in one month.

A boy twelve years of age presented himself with a ring-worm of the scalp about the size of a fifty-cent piece. It had resisted treatment for several years. In this case croton oil, one in three, was used. In a few days the patch was converted into an elevated, suppurating mass, from which he suffered great pain. He was subsequently cured by means of chrysarobin. Three cases were treated by the method recommended by J. F. Payne (*Brit. Med. Journal*, May 23, 1885), the scalp being saturated during the day with the following lotion: borax, gr. xv; glycerine, \mathfrak{ss} i; water, \mathfrak{ss} vii. At night this ointment was applied: ointment of ammoniated mercury, \mathfrak{ss} ii; sulphur, gr. xv; lard, \mathfrak{ss} i. As these applications were without benefit in three weeks, chrysarobin was

substituted, with a similar beneficial effect as in the other cases in which it had been used. The last three cases I have seen were treated by means of a lotion composed of one grain of bi-chloride mercury to the ounce of alcohol, alternating with Payne's method. The treatment succeeded in two of the cases; in the third the cure was effected by means of chrysarobin. In examining the report of these cases it is noted that two cases were cured by means of Coster's paste, alternating with the bi-chloride lotion; two by Payne's method, alternating with the bi-chloride lotion, and seven by means of chrysarobin pigment. In all, epilation was practised. As relapses are extremely liable to occur, the hairs, in all these cases, were repeatedly examined by means of the microscope, without finding any evidence of the parasite after the disease had been pronounced cured.

Chrysarobin, as is well known, is derived from Goa powder, and though long used in South America as a local remedy in skin disease, it was not till about fifteen years ago that the attention of the general profession was called to its efficiency as a parasiticide. The chief objections to its use are that it may produce too much irritation, and stains the skin a dirty yellow color. It is advisable to use it sparingly at first on the face and scalp, but in my own experience I have never seen any harm result from its rather free application to these parts. It may be used in the form of an ointment, dissolved in chloroform or liq. gutta-perchæ. In the above cases it was used as a pigment dissolved in the liq. gutta-perchæ (ten per cent.) as first recommended by Dr. W. T. Alexander (*Journal Cut. and Ven. Diseases*, February, 1885). The liquor gutta-perchæ has the property of forming an artificial cuticle, which does not become brit-

tle, remains intact for several days, and is impermeable to water. In consequence of this quality it deprives the parasites of air (oxygen) and moisture, elements essential to their growth. Dr. Alexander's method of using it is as follows: The hair is closely cut, the scalp cleaned, and hairs extracted; the area of disease is then covered with a layer of pigment, applied with a stiff brush; the application renewed twice a week. The author says this treatment may not possibly cure all cases, but he recommends it for trial as a sound therapeutic measure. My experience leads me to second the author in this statement.

Electrolysis in the Treatment of Diseases of the Skin.*

FARADAY first used the term electrolysis, signifying the act of chemical decomposition of such substances as water by means of electricity. Shortly after this, Davy, by the same means, succeeded in decomposing the alkalies soda and potassa, and proved that they were the oxides of the then unknown metals sodium and potassium. Physicians have since utilized the power of the galvanic current to destroy tissue elements and surrounding fluids by chemical decomposition. They found, if the current was introduced into the tissues by means of needles, oxygen and acid would collect around the positive pole; that it (the acid) would act as a caustic and char the tissues, while hydrogen and alkalies would collect around the negative pole and cause absorption.

Electrolysis has been used for the destruction of small

* Reprint from the *American Practitioner and News*, Louisville, Ky.

vascular nevi, freckles, telangiectasis, small tumors, the small non-inflammatory elevations called milia, connective tissue, new growths, and chancres; for the removal of superfluous hairs, and for the obliteration of enlarged blood-vessels in rosacea. In general surgery, Dr. W. H. Dukeman, of Olean, N. Y., reports the successful treatment of twenty-eight organic strictures of the urethra. For aneurism, according to A. M. Hamilton, forty-eight out of ninety cases were cured by this method. It was used in the latter cases to secure a gradual deposit of layers of fibrin. Dr. Craft, of Cleveland, has successfully employed this method in the treatment of hernia and hemorrhoids.

The instruments necessary are a good galvanic battery, electrodes, needle-holders, and needles. Batteries, devised by certain makers, have been particularly recommended, but any twenty-cell galvanic battery that produces a good electric-motive force is sufficient. Different kinds of needle-holders have been employed, one having a current-breaker attachment; but this is not generally used, as it produces too great a shock. Dr. Piffard has invented one with a lense attachment. Dr. Heitzmann recommends one with a guard attachment to measure the depth to which the needle is introduced. Dr. Hardaway prefers a heavy holder in the removal of hairs, so the needle may pass in by its own weight, thus avoiding perforation of the follicle wall. As to the needle, many different kinds have been used, as the fine cambric needle, curved steel needles of different shapes and sizes, and the irido-platinum needle, suggested by Piffard. Dr. Hardaway believes less scarring will follow the operation if the needle is coated up to a certain point, so the disintegration will be entirely subcutaneous; but the instrument

known as the jewelers' broach is now generally used in preference to any other. It is flexible and very fine. In operating, the needle is connected with the negative pole, while the patient holds the sponge electrode attached to the positive pole.

Several practical points are to be borne in mind. To cause absorption, attach the needle to the negative pole, for if the positive pole is used it will produce charring of the tissues and leave a permanent scar. The needle is first introduced, and *then* the patient places the disengaged hand over the positive electrode. The circuit should not be broken until the needle has been withdrawn, for otherwise shock is produced. The amount of pain during the operation varies with the individual and the part operated upon; it is usually very slight, but in an excessively irritable skin it may be decided. After a time such tolerance is established that even the most nervous and irritable patients do not complain. Muriate of cocaine has been used in these cases, but those who have resorted to it report little benefit from its application. The most sensitive points are found to be about the upper lip.

In 1879 Dr. Hardaway recommended electrolysis for the obliteration of enlarged blood-vessels in rosacea. If the vessel is a large one, he makes perpendicular punctures along its course; if a short one, the needle is inserted parallel with and into the vessel. He also recommends it for the same purpose in telangiectasis. At the last meeting of the American Dermatological Association he spoke of it as a valuable means of getting rid of freckles, particularly the large dark ones. In the treatment of nevus vascularis, commonly known as "wine marks," Pillard uses small needles attached to the negative pole, introduced superficially in the skin, with a sponge electrode

placed near by on the integument. Others advise the introduction of two needles from opposite points, attached to the negative and positive poles. I have removed small nevi in this way, leaving hardly a visible scar. Duhring speaks of the advantages of this method of treatment over all others for small wine marks, its advantages being "the safety of the operation, the absence of hemorrhage, the cessation of pain after the operation, the absence of scar, and, finally, the simplicity, rapidity, and effectiveness of the operation." In the December number of the *Journal of Cutaneous and Venereal Diseases*, Dr. Biart, Omaha, Neb., calls attention to the destruction of chancre by electrolysis. The results, he says, are gratifying and preferable to excision. It has advantages over excision on account of its "destructive action on the virus, beyond the seat of the actual destruction of tissue." The operation, he further says, "was undertaken with a view of ascertaining whether or not the initial sclerosis be purely local, which I am inclined to believe, or merely a symptom of constitutional syphilis."

The removal of hairs is the most important use to which the physician has applied electrolysis. Dr. Michel, of St. Louis, was the first to remove hairs in trichiasis by this means. Dr. Hardaway, of St. Louis, about the same time, made use of it in removing superfluous hairs; since then it has been recommended and practised by Piffard, Duhring, Fox, Hyde, White, and many others. That the removal is permanent is best illustrated by the case of Dr. G. H. Fox, in which he removed eight thousand hairs, "the face being now practically free from hair, and has been for three years." The statement has been made that the success of the operation depends entirely upon the skill of the operator; the object to be accom-

plished is the destruction of the hair papillæ. But the hair may be spiral in its course through the skin, or may be placed at an angle with the surface of the integument; in such cases of course the papilla would not be reached in the operation. In the experience of Dr. Fox, one per cent. of hairs removed returned; in that of Dr. White, one in ten returned; Dr. Heitzmann, one in four. Dr. Hyde speaks of the great injustice done the American operation in the last volume of *Ziemssen's Cyclopaedia*, where it is stated that fifty per cent. of hairs return. The operation for the removal of hair is as follows: The hair to be extracted is put slightly on the stretch with forceps. The needle is then inserted in the follicle; the patient, holding the positive electrode in one hand, places his disengaged hand over the sponge. The needle is allowed to remain in contact with the papilla and follicle for about thirty seconds, when a slight frothing will be observed around the opening of the follicle, and the hair is found to be so loose that it may be extracted with very slight traction. After the operation, a small wheal will be left, but this will disappear in the course of a few days. Scarring is usually so slight that it is not perceptible.

From six to twelve cells of the battery are used, according to the pain produced.

Treatment of Epithelial Cancer.*

(Read before the Medico-Chirurgical Society, Louisville, Ky.,
July 15, 1887.)

THERE is hardly a disease to which the flesh is heir that has been subjected to such a variety of treatments as epithelioma, from entire extirpation by the knife to the latest method of treatment by means of aveloz, the juice of a plant native to Brazil, not forgetting the *renowned* cancer cure, chian turpentine. Though such an eminent authority as Kaposi, of Vienna, has declared that, "no matter whether an epithelial cancer has been removed by the knife or by cauterization, recurrence always takes place within a shorter or longer period of time," I take it there are few, if any, dermatologists of the present day who would agree with him in such an unfavorable prognosis. Of course recurrence may take place, no matter how the lesion may be treated; but however unfavorable the prognosis, without doubt the great majority of authorities are agreed the disease may be permanently eradicated from the system. In the following remarks I will only refer to the local treatment of the disease, as constitutional treatment is generally conceded to be ineffectual. Before referring to my individual experience, I would make brief mention of several well-known methods of treatment, together with the more recent advances in the therapeutics of the disease.

Local application of arsenic, especially in the form of Marsden's paste, has perhaps had more support than any other means of treatment. It consists of equal parts of

* Reprint from *American Practitioner and News*, Louisville, Ky., August, 20, 1887.

arsenous acid and mucilage gum acacia; the whole of the cancerous surface is spread over with this paste, provided it is not more than an inch square; in a few hours a bread and milk poultice is substituted, a slough forms, dries up, and falls off in a few weeks. Considering the amount of pain occasioned by this application, and it is considerable, the danger of constitutional poisoning and the limited surface that can be dealt with with safety, I am of the opinion it should be seldom resorted to; in fact, if the lesion is not more than an inch square, it can, in the majority of cases, be easily removed by the knife, and then, if you please, treated with some less painful caustic. Among other caustics may be mentioned chloride of zinc, alone or with flour, acid nitrate of mercury, sulphuric acid paste, Vienna paste; but all these applications cause more or less suffering, and the amount of tissue destroyed cannot always be controlled.

McCall Anderson has derived benefit from painting the surface with Fowler's solution of arsenic. Dr. Thomas Smith recommends a saturated solution of salicylic acid. Dr. Wm. Collins reports the cure of several cases by means of an application of powdered ergot to the sore.

Of the more recent remedies that have been highly extolled for the cure of this disease may be mentioned the juice of aveloz. A few years ago a small amount was sent from Brazil to the authorities at Washington to distribute. Since then there have been several reported cases of cure from its use by different observers. After an experience of one and a half years in its use as a remedy for cancer, Dr. Ladowski came to the conclusion that, united with a powerful escharotic action, it has the power of **dissolving organic tissue.**

The juice is applied by means of a brush, and repeated

every few days. It is said to have extremely irritating properties to the sound tissues, and that its application is very painful.

Reclus reports several cases cured in a few weeks by keeping the parts covered with compresses wet with a saturated solution of chlorate of potassium. Resorcin in the form of an ointment has been used in some cases with benefit; but of all recent remedies pyrogallic acid seems to be the most popular. Dr. Bulkley has used the pure acid sprinkled in the sore with good effect, but it is usually advised to use it in the form of an ointment, in from half a dram to two drams to the ounce. I believe it was first recommended by Jarisch about eight years ago. Though its effects are perhaps slower and less brilliant than by some other methods of treatment, on account of its being painless and comparatively free from danger it is to be recommended in many cases where it is impossible or not expedient to use the knife. The ointment is applied four or five days continuously, renewed twice a day; after an interval of a few days it may again be applied; the parts are then dressed with vaseline. It will be observed that the patient in many cases now first complains of pain; this is believed to be caused by the returning circulation in the parts. The entire extirpation by the knife is probably the best method of treatment when it can be practised; not only the lesion itself, but a considerable amount of surrounding tissue should be cut away, or the curette may be used, as for lupus vulgaris, as recommended by Auspitz and others, then the surface may be treated with some caustic whose action may be easily controlled, such as caustic potash. If the knife cannot be used for any reason, and if the glands are already affected, for the moral effect, if for no other reason,

such an application as pyrogallic acid may be used with at least a hope of doing some good. To illustrate the benefit that may result from this application I will now report several cases :

CASE 1.—Seen with Dr. G. H. Fox, in October, 1885, at the Skin and Cancer Hospital, New York city. A man about forty-five years of age had twenty-four tubercles scattered over the face, with one deep ulcer on the cheek causing ectropium of the eyelid. There was no family history of cancer; the disease had lasted for thirteen years. Diagnosis of Dr. Fox, multiple epithelioma. The disease was being treated with pyrogallic-acid ointment; within a few weeks the lesions were all looking better: some had entirely healed.

CASE 2.—Patient at Louisville City Hospital; male, sixty years of age; an ulcer about the size of a silver dollar situated on the scalp. Diagnosis of cancer verified by the microscope. History of having received a blow on the head some years previously causing an abrasion which had never healed; had been operated on by the knife without benefit, the disease soon making its appearance in the scar. Pyrogallic-acid ointment, half a dram to the ounce, was applied continually for five days, being renewed twice a day. After an interval of a few days the acid was again applied for a week and the surface dressed with vaseline. Within a month after beginning treatment the ulcer was reduced to the size of a ten-cent piece. During my temporary absence from the city the patient was operated on with the knife by a surgeon of the hospital staff, who was unaware he was then under my treatment.

CASE 3.—Mr. C., fifty-six years of age; ulcer on the right side of the nose and cheek. The disease made its

appearance as a "mole" five years previously. In a short time "the part scaled over" and was treated as an eczema. Cuticura and like remedies were used, but of course the disease did not improve. The ulcer was irregular in outline, hard, indurated edges, red base, fetid discharge, the glands not affected, the patient's general condition good. Applied twenty per cent. pyrogallic-acid ointment for four days. After an interval of a few days it was again applied for five days, when the granulating surface was dressed with vaseline. Within six weeks the lesion had entirely disappeared; one year later there had been no return of the disease.

CASE 4.—Mr. S., sixty-five years of age; an ulcer the size of a twenty-five-cent piece, situated on the right temple; edges and surrounding tissues somewhat infiltrated, secreting an offensive fluid; glands not affected. Patient complained of some pain. The disease first made its appearance as a wart; had been treated by means of Marsden's paste before coming under my observation, but made its appearance again within one year. It was treated with pyrogallic-acid ointment as in the other cases reported; within a month the sore had entirely healed over. Heard from the patient two years later; he then stated there had been no return of the trouble.

In each of these cases the diagnosis was verified by means of microscopical examination of the tissues and secretion. Though the external application of pyrogallic acid is comparatively free from danger, there has been reported several cases of death from its use. Besnier reports four cases of poisoning, two of which proved fatal, under the care of Vidal and himself. The poisonous effects are supposed to be due to the great affinity of the drug for oxygen. Besnier, in a case of poisoning

by it, is said to have saved a patient's life by making use of inhalations of oxygen.

The Influence of Syphilis upon Non-Syphilitic Eruptions of the Skin.*

(Read before the Kentucky State Medical Society, June, 1886.)

THE prevalence of syphilis is no doubt exaggerated; but as it is met with in all ranks of society, at every age, among the innocent as well as the vicious, it comes in some form before the notice of every physician, and, as has been truly said, its recognition is the most important feature of dermatological diagnosis. In most statistics of disease of the skin, the cutaneous lesions produced by syphilis stand third on the list: in fourteen thousand cases reported by the American Dermatological Association, 1885, it occurred in 11.5 per cent. of all cases.

Though such an excellent authority as Tilbury Fox† has declared the modification of skin disease by the syphilitic poison is a most important fact, the majority of dermatologists whose writings I have consulted have entirely ignored or positively denied the possibility of such an influence. A. R. Robinson,‡ of New York, does not believe at any time it alters or modifies eczema, but he has seen cases of eczema modified by the "rheumatic diathesis." Pittard§ says he has seen cases of psoriasis, eczema, lupus, in persons affected with syphilis, but has never seen this disease modify these or any other skin eruption.

* Reprint from the *American Practitioner and News*, July 10, 1886.

† Skin Disease, Tilbury Fox. Wood & Co. 1884.

‡ *Journal Cutaneous and Venereal Diseases*, March, 1885.

Bronson* believes pre-existing lesions of the skin are rarely affected by syphilis. It is acknowledged that certain constitutional conditions may predispose the development of certain cutaneous diseases: Gout and rheumatism dispose to attacks of eczema; gastric and intestinal disorders to urticaria, acne and affections of the liver, etc., to pruritus.

If these conditions can so act upon the skin as to give rise to disease, I take it we are justified in believing they may modify pre-existing disease. Especially is this true of syphilis, for here we find the most marked alteration in tissues from their normal condition; the red globules of the blood are diminished in number, the white increased, in consequence the tissues are poorly nourished: the blood conveys the virus and new cells through the body, especially to the periphery, where they are deposited, causing irritation of the skin and changes in its sensibility. A splinter of wood imbedded in the skin has been known to give rise to a tubercle having all the characters of a specific lesion; a \dagger in may be inserted in it, in some cases, without giving rise to pain.

In what way are skin eruptions modified? The disease causes an alteration in the nutrition of the tissues; the normal resisting power is weakened, so that the change in the tissues usually produced by syphilis is impressed upon it, it is altered by being made more chronic, there is greater pigmentary deposit, less scaling, more crusting, and more infiltration, especially at the margin of the lesion.

First, as a cause of chronicity, Keys says many chronic maladies of the skin, as well as of internal organs and tissues, when occurring upon syphilitic patients, do better

* *Journal. Cutaneous and Venereal Diseases*, November, 1884.

it to the treatment suitable to this disease is added a certain amount of anti-syphilitic medication. According to Tilbury Fox,* an old syphilitic taint is to be carefully dealt with in reference to skin diseases.

This should be recognized as a distinct and special cause of chronicity in certain non-syphilitic eruptions.

Bulkley says,† in rare cases we have both a true eczema and a syphilitic eruption combined with it. These cases are very difficult of accurate diagnosis, and yet more difficult to treat, while the simple, uncomplicated cases of syphilis yield with marvelous rapidity, and most of the eczematous lesions can be managed satisfactorily. These complex cases resist remedial measures most annoyingly. Several such cases have occurred in my own practice: a woman presented herself at the dispensary with an eruption on the palms of the hands and fingers. It had made its appearance eight years previously, being better and worse at times, but never entirely disappearing. Several competent observers pronounced the disease eczema, but the skin was observed to be darkly pigmented in places, the lesions marginate in outline, not fading into the surrounding skin as is usual with eczema; this, together with the fact that appropriate treatment for this disease failed to give relief, induced the observer to institute a thorough anti-syphilitic treatment, with the result of a complete disappearance of the eruption within three weeks. Another case, that of a boy nineteen years of age—patches of eczema on the flexor surface of the elbow and on the leg below the knee; no eruption elsewhere; each plaque about the size of a fifty-cent piece, circular in shape, slightly raised borders covered with small, white

* Tilbury Fox, *Skin Diseases*. Wood & Co. 1884.

† *Eczema and its Management*. Bulkley. Second edition. Putnam & Sons.

furfuraceous scales. The eruption made its appearance two years previously. The patient was much troubled with a severe pruritus, which was not confined to the site of the eruption. Appropriate treatment failed to give relief, as he had marked symptoms of inherited syphilis; mercurial inunctions over the patches of disease and iodide of potash were substituted, in a very short time the eruption began to fade, and the itching entirely disappeared. It is a fact that some eczematous eruptions may be so changed in appearance, it is difficult, if not impossible, to recognize the nature of the disease unless, at least, the possibility of its being altered by syphilis is accepted. To this truth many competent observers bear witness.

Dr. G. H. Fox has presented before the New York Dermatological Society three cases of syphilis modified by eczema; they were modified in that some of the patches presented an orbicular, scalloped, raised margin, with a tendency to heal in the centre. Besides this, there was something in the appearance of the skin, which he could not describe, that led him to form the above conclusion. Dr. Fox further said he had for some years taught and argued that syphilis never modified any disease of the skin, but within the last few years he had met with and studied a series of cases that had caused him to change his mind. In my own practice I have seen not a few cases so altered as to their general appearance. On careful inquiry into the history of these cases it was invariably found there had previously existed unmistakable signs of syphilis; examples of other skin eruptions, altered in many of their characters by constitutional syphilis, are referred to by a number of observers. Fernmuller (*Venerereal Diseases*, Bumstead & Taylor, Henry C. Lee, 1883)

speaks of transformation of variola pustules into syphiletic ulcers and tubercles in infected subjects. It has been stated that so-called herpetiform chancre is simply herpes modified by syphilis, the vesicles running together and forming an ulcer. The modification of cancer in syphiletic subjects has been fully described by Dr. Ouzenne (*Journal de Med. et de Chirurg.*, Sept., 1884). He speaks of it as a hybrid disorder arising from the combined action of the two diseases. He describes these varieties, which he calls cancro-sclerous, cancro-gummatus, and cancro-sclerogummatus: in the second form there is an excavated ulcer with an indurated base like that of cancer, but without the bleeding surface and perpendicular walls; the other two varieties exhibit very diversified appearance. He further says hemorrhage is uncommon, and pain is usually absent. There are recorded innumerable examples of the changes produced in psoriasis in infected subjects: Hebra believes this disease is at times modified by syphilis. Bulkley refers to a case of psoriasis (*Journal Cutaneous and Venereal Diseases*, Nov., 1884) that had existed for eighteen years. Four years ago the patient said he had a chancre; since that time a difference in the appearance of the eruption has been observed. Since the chancre appeared he has had an eruption on the palms and soles that had not existed before; the psoriatic patches are of a deeper red than is usually the case in this disease, and the skin is thickened. Dr. Bulkley has seen a number of cases in which the two diseases were combined, the psoriatic patches undergoing infiltration, becoming more crusted, thicker, duskier, and more sharply defined. A case came under my observation some months since, a man forty-five years of age with an eruption over the shoulders, arms, and hands: the plaques were circular in

form, covered with a few small, white, adherent scales, varying in size from a fifty-cent piece to a split pea, the latter situated on the palms. Appropriate treatment for psoriasis was without benefit as there was a greater amount of infiltration than usual, scales not as thick or numerous, and as it was now ascertained he had had syphilis some years previously, he was put upon specific treatment, from which he received great benefit. It has been stated (Diagnosis of Skin Diseases, Liveing, Wood & Co., 1879) there is great plausibility in the hypothesis that lupus may occur in a syphilized subject, and be in consequence modified; the tubercles are said to be smaller and less vascular than usual. As examples of other diseases that have been altered in some of their usual characters by the syphilitic virus, Taylor says pneumonia or bronchitis occurring during the course of the disease are liable to be more or less modified; acute rheumatism has been observed to run an exceptionally severe course and be prone to relapse. Vernueil observes, when syphilis exists at the time of the infliction of a wound, it may assume an appearance similar to that of syphiletic ulcers in process of evolution.

According to Diday,* inherited syphilis imparts to the constitution a debility which predisposes to all kinds of organic and functional affections. Acute diseases occur more readily or are more severe, catarrhal thesis is more persistent, and diathesis more deeply rooted.

Innumerable examples of skin eruptions, altered more or less in their general characters by syphilis, could be given, but these are sufficient to convince me, at least, of the possibility of such an occurrence. Frequently we may be able to diagnose a case by the appearance of the

* On Syphilis in New-born Children, by P. Diday. New Syd. Soc., 1859.

eruption alone; the positive history should always be ascertained when possible, but the negative history amounts to little in such cases, as the patient may be entirely unaware he ever had the disease; the initial lesion may have been so slight as to have escaped notice, or he may have been treated for the disease without being aware of it. I have treated a man for syphilis in whom the symptoms did not manifest themselves for an interval of fifteen years; he had completely forgotten he ever had an eruption till reminded of the fact by his wife.

In the diagnosis of simple skin diseases, as well as the syphilides, it is advisable to depend entirely upon the objective symptoms, considering the subjective symptoms only to verify the diagnosis, as is well illustrated in the account of the following case I saw at the New York Polyclinic: A patient appeared before the clinic with a copious papular eruption over the thighs, legs, and arms; the papules were large, flat, circular, and brownish in color, with a tendency to form patches. A mucous patch existed on the lip; diagnosis, late papular syphiloderm. On questioning the patient, she said the skin *itched very much*, and that she suffered from rheumatic pains, but only during the *day*, never at night; did not remember having had sore throat; had been a widow for six years. It was subsequently ascertained that she had been treated for syphilitic retinitis. The eruption soon afterwards disappeared under mercurial treatment. If the subjective symptoms had been first considered in this case, they would have tended to exclude syphilis in the mind of the examiner. It is out of the question to make direct inquiries of women in some cases. Keys says, when least expected syphilis crops out as a cause of symptoms which may have baffled explanation in persons whose character and surroundings placed them above reproach.

A well-known dermatologist told me he pronounced a skin eruption lupus, and treated it as such without success ; the patient was a lady whose social position placed her entirely above reproach. On further inquiry into the history of the case, he found she had had well-marked symptoms of syphilis years previously without being aware of their nature. He then treated her for this disease, with the result of disappearance of the lesion.

In the foregoing remarks I have endeavored to show the importance of recognizing the *possibility* of constitutional syphilis modifying certain non-syphilitic eruptions. I would not be understood as declaring that all eruptions of the skin occurring in syphilitic subjects were of necessity altered in their appearance and usual characters, but simply that such changes are *possible*, and do occur in a certain number of cases. I am of the opinion that unless such an influence is considered we will many times fail in our diagnosis ; in consequence, our prognosis will be at fault, and the treatment instituted will avail nothing in a disease so modified unless the syphilis is treated in conjunction with it.

Mercury in the Treatment of Syphilis.*

(Read before the Medico-Chirurgical Society, February 24, 1888.)

THE first question that naturally presents itself for consideration is the period at which to commence treatment ; on the appearance of the initial lesion, not till the manifestation of secondary symptoms, or by the so-called expectant treatment, as recommended by Sigmund. Though

* Reprint, *Southwestern Medical Gazette*, Louisville, Ky., March, 1888.

it is true many cases of syphilis may run a favorable course without any treatment, the majority of authorities agree with Finger, of Vienna, who says to refrain from treatment would be "simply a direct sin."

Those who believe the disease is at first, for an appreciable length of time, entirely local, advise, of course, the destruction of the chancre. Prof. Morrow (*Journal Cutaneous and Venereal Diseases*) has published an elaborate resumé of this whole subject; his conclusions are the weight of authority—is against excision as a means of aborting syphilis. Though it has been advocated by Auspitz, Mura, and other German authorities, nearly all syphilographers in this country condemn it as a useless procedure, as do Diday, Zissl, and Sigmund.

Dr. Zarewicz reports fourteen cases in which he practised excision in from six hours to twenty-two days after the appearance of the initial lesion. Though constitutional symptoms manifested themselves in all the cases he still advocated the procedure, because he believed it would modify the secondary symptoms. Prof. Taylor, on the other hand, says those cases ultimately do best in which specific treatment is deferred until the secondary stage. Prof. Kaposi advises against being too hasty with mercurial treatment. If we institute treatment at this time, the patient, and even physician, may be left in doubt whether he ever had the disease. I recall a case, under my treatment some time since, that will illustrate this point: a young man went to his physician with a sore on the glands penis, which was declared to be a chancre on account of its "hard edges and swollen gland;" he was immediately put on mercury; a few weeks later an eruption appeared which was declared a syphilide, but he did not improve under treatment. He was sent to me,

when a profuse papular eczema was found on his chest and face; this eruption, of course, was simply a coincidence and soon disappeared under treatment. Though it returned once or twice it was always of the same form.

In another case, the eruption, which was due to the mercury alone, was declared to be a syphilide. The man had presented himself to his physician with a local sore and sore throat; he was put upon a course of mercurial treatment; a short time after a vesicular eruption made its appearance, which was thought to be due to syphilis. Soon after stopping the administration of the drug the rash disappeared; the patient has never since had any manifestation of the disease. Either of these patients might have gone through life in the firm belief that he had been afflicted with this horrible malady. Only a few days ago a patient came to me with tylosis of the palms; he said he had syphilis, and probably this was a late manifestation of the disease; on closely questioning him he gave the following history: "Two years ago I had a sore on my penis, which the physician said was due to syphilis. Did not have a sore throat then or since; no loss of hair; no rheumatic pains; no swollen glands and no eruption of any kind, except this condition of the hands. Believing I had the disease, I have been careful to prevent my wife from becoming pregnant." Those who favor treatment at this time say the patient is rendered anxious and kept in suspense without it; but what is such anxiety in comparison with that he must suffer who is never to know he ever had the disease? It is impossible to recognize syphilis from the appearance of the initial lesion alone; it would seem superfluous to make such a statement, but for the fact there are many physicians that believe a sore that is hard or soft is an invariable sign for or against syphilis.

Considering all things, it would be well to adopt the maxim of Davy Crockett: "Be sure you are right and then go ahead." There is no question at the present day that mercury is a specific for syphilis, but the best method of administering it has led to endless discussion. Every syphilographer has his favorite method for treating the general run of cases—by hypodermic injections, baths, vapor baths, by the mouth, and by means of inunctions. Neither can be said to be *the* method above all others, but rather should the method be suited to the individual case. Hypodermic injections have been highly extolled of late by some authorities; mercury in some form is usually advised, such as ammoniated mercurial peptone. Lericq was the first to recommend bi-chloride. Balzac employs the yellow oxide. Liebrich regards hydrargæum formidatum much the best substance. Nearly every preparation of mercury has its advocates. Throman recommends iodoform. Besnier and others have abandoned hypodermic medication; Fournier says: "Patients leave the Du Midi and Louvine, where this treatment is employed, and flock to the St. Louis, where they know they will not receive it." The method has been extensively tried in the hospitals of Paris; Dr. L. Brocq (*Journal of Cutaneous and Genito-Urinary Diseases*) says: "The discussion upon the treatment of syphilis which has just taken place at the Medical Society of the Paris Hospitals has, then, had for result the demonstration that, even with the perfection introduced by Dr. Balzer, the method of injecting the insoluble preparations of mercury cannot yet enter into current practice." The objections to it are, it is painful, apt to produce abscesses, inconvenient in many cases; the results are said to be negative; in others it will too quickly produce salivation; and

it necessitates repeated visits on the part of the patient, at times once or twice a day. It must be confessed, according to some, this last objection should not be considered. In some cases baths of bi-chloride mercury and vapor-baths are of great utility, but as a rule their effects are not constant; they are inconvenient, and, as Prof. Taylor has said, "resource must be had to professional bath-givers, whose inherent tendency would seem to be to absorb the patient at the same time he absorbs the mercurial fumes." In a considerable experience, while serving in the U. S. Army and since practising my specialty in this city, I have met with most satisfactory results in treating syphilis by means of inunctions of mercury, though as a rule local applications to the different syphilides are regarded simply as accessories to other methods; I am of the opinion many lesions that have resisted treatment will readily yield to this method; as an illustration I recall one case in particular. The patient complained of a painful tubercular syphilide about the face, with several scaly patches on the palms and wrists. The disease at first had not been regarded as syphilis; in consequence she had received a variety of treatments without benefit. One physician regarded it as syphilis, and prescribed bi-chloride by the mouth; as the eruption persisted after three weeks of this treatment, she came under my observation. I advised local applications of equal parts of mercurial ointment and lanolin, to be rubbed on the face twice a day. Improvement began within a few days, and within three weeks the eruption had almost entirely disappeared. She had no other treatment than this except salicylic-acid plaster mull, thirty-eight per cent., to the scaly patches on the wrists and hands, which soon caused them to disappear. I

have found that strong applications of salicylic acid or chrysarobine in the form of plaster mulls will frequently act even more beneficially than mercury to scaly lesions on the palms and soles; the salicylic acid is used in greater strength than usually advised, thirty-eight per cent. In another case a man twenty-five years of age contracted syphilis. One year afterwards scaly plaques appeared on the palms and soles, large flat papules on the chest and back: as a test mercurial inunctions were employed on the palms alone; these parts soon presented a healthy appearance, but the eruption persisted elsewhere. The soles of the feet were then treated with a like result. Inunctions were used every day till all the lesions disappeared. Sigmund employed inunctions of mercury in treating over nine thousand cases, and regards this method "as the simplest and most efficacious mode of treating the various forms of syphilis." Brodie, Barton of Dublin, Taylor, and Bumstead, and many other authorities, prefer the gradual introduction of mercury in the system by this method to any other plan, in treating the general run of cases. Oleate of mercury in five or ten per cent. strength is advised by some, but as it will stain the clothes and will frequently irritate the skin, I prefer to use equal parts of mercurial ointment and lanolin or agnine. Contrary to the general idea, I avoid the portions of the skin that are thin and more apt to be irritated, such as the groins, arm-pits, and inner portions of the thighs. The patient is instructed to apply a small portion of the ointment to different parts of the body each day, to be rubbed thoroughly in the skin, to take a bath on the seventh day without applying the remedy, then commence again, as advised by Taylor. Iodide of potash may be given by the mouth at the same time, as

soon as the existing lesions have disappeared. Keyes' "tonic treatment" is substituted; that is, some preparation of mercury, preferably the protiodide, is given in increasing doses till the "full dose" is reached, that is, when the patient's gums are touched and there is evidence of intestinal irritation, such as pain, diarrhœa, etc. This "full dose" is then cut down one-half, which is to be continued for several months; then, to follow Fournier's advice, there should be an intermission of a few weeks; the treatment is again taken up, to be continued for two years with increasing intermission. In introducing this subject before the notice of the Society, it is with no idea of advancing anything new in the treatment of syphilis, but rather for the purposes of discussion, and to call particular attention to the method my personal experience has taught me to be the best in the general run of cases.

Salicylic Acid in Cutaneous Diseases.*

(Read to the Louisville Medical Society, Jan. 5, 1888.)

THOUGH salicylic acid did not come into general use till about 1874, it is now more or less extensively employed in the treatment of skin diseases.

If used in sufficient strength, I do not believe there is a better application for certain chronic localized skin affections—such as eczema, especially of the palms and soles, small pigmented naevi, callositas, corns, pigmented spots, and in the treatment of psoriasis and lupus. It is superior to preparations of tar, chrysarobin and pyrogall,

* Reprint from *Progress*, Louisville, Ky., January, 1888.

in that it is odorless, cleanly, does not stain the skin, and **is not so apt to produce irritation.**

We are warned against using it in greater strength than 10 or 20 per cent. Kaposi recommends it for the removal of pigmented spots, about 10 per cent. Mr. Calender, of London, says 2 per cent. applied to wounds may cause severe local irritation, and even constitutional disturbances. It is my purpose in this paper to report the cure of several cases of skin diseases, in which it was used in the form of 38 per cent. plaster mulle. But first let me endorse all that has been said in praise of plaster mulle as first introduced to the profession by Prof. Unna, of Hamburg: It is said they are too expensive for general use, but they are really cheaper than ointments, as there is no waste. One application will last several days, and they do not deteriorate from age. I have kept them for over a year, and then found them as good as when first procured; when all their advantages are fully understood, they will come more into general use. They are not only cheaper than ointments, but more cleanly, more easily applied, as they will adhere of themselves without the use of bandages.

In the following cases the salicylic acid plaster mulle was applied from eight to ten hours, followed by oxide zinc plaster, or Lassen's paste.

CASE 1.—Miss B. Eczema squamosum of the whole face, a few scaly infiltrated patches about the wrists and hands. The eruption first made its appearance four years ago in the form of vesicular eczema of the face and neck; with the exception of some improvement at intervals, it had existed ever since she had been under the care of a number of general practitioners and specialists. The eruption had improved somewhat while under treatment

at Hot Springs, Ark.; but there she was "taken with a fever," when the eruption returned as bad as ever. Most of the physicians she had consulted had employed mild, soothing ointments and lotions, with arsenic internally; had warned the patient against the use of stimulating applications. A specialist had been most successful in treating the case by means of tar and zinc plaster.

When I first saw the patient, the skin about the face was very red, excoriated by scratch marks, somewhat infiltrated, and covered with crusts. Altogether she presented such an unsightly appearance she never appeared without being heavily veiled. The itching was so intense while asleep she would tear off any application that could be applied; had bound up her hands, had even tied them, but all to no purpose; complained of irregular menstruation, chronic constipation, and was in such a nervous condition could scarcely keep still a moment. I first prescribed pills of phosphorus, iron, and strychnine, which she continued to take throughout the treatment—corrected the constipation, regulated the diet, etc.

Having a number of plaster mulle in my office, applied boric acid to the right cheek, zinc to the left, and salicylic acid to several patches on the wrists. The following day, on removing the boric acid, the parts were seen to be highly inflamed, with many vesicles scattered over the patch; the zinc plaster had fallen off, leaving the part less red and somewhat improved in appearance. She stated the salicylic acid had been rather painful at first, but did not notice it after an hour or so. The lesions were now found of a mahogany color, as glistening as if varnished. Slight desquamation; applied salicylic acid, 38 per cent. to all lesions, to remain in place eight hours. Within four days there resulted a complete desquamation

of the epidermis, leaving only a slightly reddened surface. the patient stated there was entire cessation of itching immediately after applying the plaster.

Applied, at various times after this, tar, mercury, bismuth or sulphur ointments, but these applications either did no good or caused harm. As less than thirty-eight per cent. salicylic acid plaster mulle could not be obtained in this city, used it in the form of ointments, ten and twenty per cent., but with little or no effect. At last, again resorted to thirty-eight per cent. ; applied it several times, in the intervals using Lassen's paste. At this writing the skin about the face is still somewhat red, but, from the great improvement that has already taken place, I have every reason to hope for a complete cure.

CASE 2.—Mr. N. Eczema rubrum on back of the hands and wrists. While under treatment for several months many different applications had been used without benefit. The skin was much reddened, infiltrated, covered with scratch marks, deep fissures about the hand, caused severe pain; made several applications of salicylic acid, in the intervals used zinc ointment; within two weeks patient dismissed cured.

CASE 3.—Mrs. C. Eczema, back of hand. Had been treated mainly by means of poultices. The hand was much swollen, reddened, and very itchy, with many fissures that tended to bleed. Touched them with nitrate of silver, and advised an evaporating lotion. In a few days swelling had disappeared; then instituted same treatment as in the other cases, with the same favorable **termination in ten days.**

Have been successful in treating many other cases of eczema in various situations. One case particularly is worthy of mention :

CASE 4.—Mr. H. complained of a reddened, infiltrated condition of the palms that made its appearance as soon as cold weather set in, lasting throughout the winter, to disappear on the advent of warm weather. He had at times used a variety of local applications without much benefit; complained chiefly of the pain caused by the deep fissures that extended across the palms of the hands; made use of caustic potash solution, twenty grains to the ounce, rubbed firmly on the parts, followed by applications of diachylon ointment; to the other, salicylic-acid plaster. Within a week the epidermis had pulled off, leaving a normal surface. It was at least three weeks longer before the part to which the potash had been applied completely healed.

CASE 5.—Mrs. A. A dark yellow pigmented patch, about an inch broad and three inches long, extended from outer canthus of right eye over the forehead. She stated that the discoloration had been caused from applying a flannel bandage saturated with equal quantities of chloroform and sweet oil to relieve severe neuralgia—she had fallen asleep, leaving the flannel pressed upon the part. It had existed for six weeks before coming under my observation; applied salicylic-acid plaster, thirty-eight per cent., for eight hours; within five days the horny layer of the epidermis had fallen off, leaving a reddened patch; made several other applications of the same plaster in the intervals, using a soothing ointment; within a month the discoloration had entirely disappeared, leaving a normal skin.

CASE 6.—Dr. R. Tylosis of the palms of the hands and the palmer surfaces of the fingers, a rounded yellow and slightly elevated patch in the centres of the palms. These patches of callositas had resisted a great variety of

remedies that had been applied during the course of three or four years. They seemed to be independent of any exciting cause. Applied the plaster for twelve hours; within thirty-six hours thick layers of epidermis had fallen off, leaving the skin almost entirely free from trouble. Applied once more, and then advised inunctions of lanoline.

I have used the plaster, with good result, for the relief of psoriasis, but generally prefer chrysarobin when it can be used. In some cases of seborrhœa it has acted well.

Prof. Nuna has met with most remarkable success in the treatment of lupus by the same means; he combines creosote with salicylic acid to reduce the amount of pain, "which is really very considerable when the plaster is applied to a raw surface." I have not found it necessary to resort to creosote, as my patients tell me the pain is not severe, and does not last over an hour or two after the application of the plaster. It has been my purpose in this paper to call attention to the fact that we can frequently employ salicylic acid in greater strength than is usually advised, and to mention a few diseases in which it is applicable, believing that those who use it will be pleased with the results they obtain.

Dermatoses Produced by Dye-Stuffs.*

THE statement has been made ("Dyed Hosiery and its Relations to Skin Irritation," by Mr. J. R. Ashwell, *New York Medical Record*, November 20, 1886) that aniline dyes will not cause irritation of the skin, even in

* Reprint from the *Journal of Women and Genito-Urinary Diseases*, February, 1887.

workmen, whose face and hands are constantly covered with them; that the dyes are then in a soluble form. The conclusion follows that dyed stockings, etc., will not cause inflammation of the skin, for the colors are then in as insoluble a form as the dyer can make them. It is further said, in the year 1872 arsenic was found in magenta, with which the hosiery was dyed in 6.5 per cent., but that the highest quantity is now under 0.09 per cent. This may be true of hosiery manufactured at Nottingham and Leicester, to which Mr. Ashwell refers, but it certainly is not true of all dyed stockings. Mr. Edson, of the New York Health Department, has called attention to the danger of wearing certain kinds of colored stockings. The dye, on analysis, was found to contain poison-quantities of arsenic and antimony. It has occurred in the experience of nearly every physician to meet with cases of skin irritation directly traceable to the dye in the patient's clothing; but every one is not equally susceptible to the influence of these irritants. Because a certain dye-stuff will cause a dermatitis in one individual it does not follow it will cause it in every case. I opine there must exist a condition of the skin that is pre-disposed to take on inflammation from certain kinds of external irritants. A number of individuals may be exposed to the same influence; a few will be affected while the others may subject themselves to such irritants with impunity. This is known to be true in the cases of eczema, the parasitic diseases, and dermatoses produced by rhus poisoning. I now have a patient under observation who has a severe inflammation of the skin, caused by being in the neighborhood of poison-ivy, though he denies having come in contact with the plant. Others may even handle it with impunity.

The eruptions produced by dye-stuffs are very similar to those caused by poison oak; they may be of an erythematous, vesicular, or pustular form; they have special characters by which they may usually be distinguished; the coloring matter is usually still visible on the skin when the patient comes under observation. They differ from eczema in not being diffused over the surface. Produced solely by local causes, they are limited in extent; the pruritus is not usually as severe; they are limited in duration, and have no tendency to recur. The vesicles, if present, are larger, more distended with serum than in eczema.

As the literature upon this subject is so meagre, it may be of some interest to report a few cases I have recently had under observation.

CASE I.—Mr. C. presented himself at my office, complaining of a severe inflammation of the hands that had made its appearance some days previously. The subjective symptoms were rather of a burning, painful nature than pruriginous; the eruption, extending from the ends of the fingers to the wrists, was of a vesicular form, each vesicle about the size of a pin-head, the skin of a bright-red color. On examining the surface closely, the discoloration was noticed to end abruptly around the wrists. On inquiry, it was ascertained he had been wearing gloves with a bright-red lining. They were warmer than he had been in the habit of wearing; in consequence the hands had been bathed in moisture from the profuse sweating. After discarding the gloves and using a simple dusting powder the eruption soon disappeared.

CASE II.—Mr. H., a tailor, complained of an acute dermatitis of the face and hands. He believed the condi-

tion had been brought about by handling certain kinds of colored goods while occupied in his business. He had of late been careless in his toilet, and had allowed the dye to remain on his hands for days at a time, till they had become much inflamed and very itchy. He had then tried to wash it off, but, as he expressed it, "the stuff became imbedded in the skin, and washing was no good anyhow." The face and hands were covered with an erythematous rash, and were very much swollen. The eyelids were nearly closed. He made a good recovery within two weeks, after thoroughly washing the parts with soap and water, and applying a lead and opium lotion.

CASE III.—Mrs. M. reported she had been subject to attacks of eczema all her life. About a week previous to her visit, an eruption had appeared on the feet and toes that had caused her much annoyance, not only from the burning sensation in the parts, but from the extremely disgusting odor. She had never been troubled with bromidrosis. The feet and toes were found to be covered with a vesicular eruption, the skin between the toes highly inflamed in some places. The epidermis had peeled off, leaving a raw, exuding surface, the parts stained of a bright-red color, from her stockings. She had never before had an eruption about the feet. She was advised to discard the stockings, and apply diachylon ointment, separating the toes with pieces of lint smeared with this ointment. The patient was not seen again for several weeks, when she returned, saying the rash soon disappeared after she had substituted *red* stockings with white soles, but that now it had made its appearance about the legs and knees. She was now advised to wear plain white stockings, when she was soon relieved from any further trouble. In

this case there can be no doubt that the inflammation was caused by the dye acting as an irritant in one predisposed to attacks of eczema.

CASE IV.—Patient affected with a rash very similar to that in Case III., but he had never worn colored stockings. The parts itched excessively; had never had any form of eruption till this made its appearance a few weeks before; had been treated for eczema for some time without benefit. His shoes had red linings, and his stockings were slightly stained with the dye. He was relieved in a few days by means of oxide of zinc and starch powder.

CASE V.—Boy 15 years of age, with diffused scarlatiniform rash extending from the neck to the buttocks. No subjective symptoms. Color did not disappear on pressure. Ended abruptly against the margin of the healthy skin. He was wearing a red undershirt that had never been washed. The eruption disappeared within ten days after discarding the shirt.

Dr. Putnam, in the May number of the *Journal of Cutaneous and Venereal Diseases*, reports a case of erythema venatum caused in the same way. In this case the rash was accompanied with sore throat and fever, rendering the diagnosis somewhat difficult.

The last case I would report is a personal experience. After wearing red fleece-lined gloves for several days, I was troubled with an eruption about the hands and fingers; the itching was severe, so much so the parts were much excoriated from scratching during sleep. The hands were stained a bright-red color which could not be washed off; a few vesicles between the fingers. A lead and opium lotion soon relieved the condition.

The Care of the Skin.*

THAT we may better appreciate the importance of the proper care of the skin, it is well to know something of the anatomy and physiology of this, one of the most important and complex organs of the body.

It is practically divided into two parts, the outer cuticle, scarf-skin, or epidermis, and the deeper true skin or corium. The epidermis is subdivided into the corneous layer, composed of flat, lifeless, colorless cells, and the malpighian layer (so named from the anatomist Malpighi), of irregular shaped cells, developing to replace those of the outer layer that have been cast off. The true skin or corium (from the Latin *corium*, leather), is divided into the outer papillary layer, made up of little elevations called papillæ, intended to give a greater amount of surface to the skin. It has been computed that there are about one hundred and fifty millions of these over the whole body; below this is the reticulated layer (from the Latin *reticulatus*, net-like or latticed), made up of elastic interlacing fibers, the meshes of which become larger and larger until we reach the subcutaneous tissue which connects the skin with the parts beneath. The corium is well supplied with blood-vessels, lymphatics, nerves, glands, and hairs. The arteries from below send off little capillary loops, which ascend in the papillæ, then descend to become veins; they are called capillary from the Latin word *capillaris*, like a hair, they are so small and slender. Some of the nerves send off prolongations that become lost in the deeper cells of the epidermis; others enter the papillæ to wind around and penetrate little bodies called

* Reprint *American Practitioner and News*.

tactile corpuscles. There are two varieties of glands, the sudoriparous, and sebaceous glands; the sudoriparous derives its name from two Latin words, *sudor* (sweat) and *pario* (I produce) —they are made up of tubes twisted in the form of a coil in the lower part of the corium, with a duct ascending through the entire thickness of the skin to open upon its surface: they are most numerous on the palms of the hands, where there are about two thousand seven hundred to the square inch, or about two million three hundred and eight thousand over the whole body, an entire length of secreting tubes of two and one third miles. The sebaceous glands are made up of a mass of lobules, with a tube that usually enters a hair follicle.

The *hairs* are regarded as modified epidermis. Almost the entire skin is provided with these appendages, except the palms, soles, and some other parts. They receive their nourishment and grow from the hair papillæ which they surround in the corium. The total number on an average head of hair is said to be one hundred and twenty thousand. They are elastic, stretching about one-third their length, and will support a weight of about two and a half ounces. In some cases they may grow to great length and in unusual quantity. As to blanching of the hair in the course of a few hours, there are but few well-authenticated cases; in one mentioned in Flint's Physiology, the hairs turned white in the course of the night, in a patient under observation at a hospital; he was suffering with delirium tremens. The blanching is caused by the accumulation of air in the medulla and cortex of the hair; there is no diminution in the amount of pigment. Sir Erasmus Wilson has reported the case of a young woman in whom the hairs covered almost the entire surface of the body, and were thick enough to conceal the skin. Cases

are reported in which the beard grew to the length of seven or eight feet.

So much for the anatomy of the skin. It is usually regarded simply as a covering for the parts beneath, and to give shape to the form, but, as has been seen, it has functions peculiar to itself. It is an *organ of sensation*, especially of touch. This sense can be cultivated to a wonderful degree. We may see this exemplified at the blind asylum, where the inmates are taught not only to read, but to study geography, botany, and anatomy by means of models, through this sense alone. It has been related of a blind sculptor that he could model the most perfect likeness simply by touching the face, and of others who could even tell the color of objects in the same way.

It is an *organ of absorption*; gases as well as liquids are taken up by the skin. This is shown in the case of animals whose bodies were subjected to carbonic-acid gas, their heads remaining free. Death from the poison soon resulted. The power the skin has of absorbing fats and oils is taken advantage of in the treatment of many diseases. Shipwrecked sailors have relieved their intense thirst to a certain extent by saturating their clothes with the salt water.

The skin is an *organ of secretion*. Sweat is constantly poured out in the form of insensible perspiration, in amount about two pints or pounds in twenty-four hours.

It has a saline taste, and is alkaline in reaction; composed almost entirely of water, it regulates the temperature to a great extent by the amount that is secreted. In the functional disorder of the sweat glands, known as bromidrosis, it has an offensive, disgusting odor, that will render a patient not only a burden to himself, but repugant to every one with whom he comes in contact. It is said

of Henry IV, of England, who suffered from this affliction, that the ladies of his court would faint from the offensive odor when in his presence. Professor Hammond relates the case of a woman who exhaled the odor of violets during an attack of hysteria. In another functional disorder of the glands, known as chromidrosis, it may be colored black, blue, or red, or it may become phosphorescent; the body then becomes luminous in the dark. The secretion from the sebaceous glands, known as sebum, is a semi-fluid substance containing fifty per cent. of fatty matter, and is intended to give softness to the skin. The so-called "flesh-worms," or "grubs," are really masses of sebum which clog up the follicles; the little black-heads are caused by an accumulation of dirt and pigment.

It is an interesting fact, that if animals are covered with an impermeable substance, death will soon ensue. It is related that a child's death was caused at the coronation of Pope Leo X by being covered with gold-leaf to represent an angel.

Considering the important functions the skin has to perform, and the harm that will result from the non-performance of these functions, the importance of its proper care can hardly be overestimated. It is true that "beauty usually produces love, but cleanliness will preserve it." Cleanliness is absolutely essential to the correct performance of the functions of the skin and the preservation of the general health. The dust, secretions, and the cast-off epithelial scales must be removed by frequent washing. This brings us to the subject of baths and soaps. The ancients indulged more freely in the bath than is the custom with us. The Romans especially fully appreciated the pleasures and necessity of the bath, and indulged in it to excess. They erected magnificent buildings, sup-

plied with all the requisites for hot, cold, and vapor-baths. From the ruins, as we now see them, we can form but an inadequate idea of their splendor. Buildings, including libraries, gymnasiums, and baths, were free to the public. Women have endeavored to beautify their skin by bathing in milk and scented waters. To such an extent was this carried in Paris at one time, that there was great scarcity of milk for the table. I know of a well known *prima-donna* who uses a quart of cologne in each bath. Turkish baths I do not believe are necessary for a healthy skin. Any of you gentlemen who propose to indulge in this *luxury* should postpone reading Mark Twain's experience till you have tried it for yourselves. I am sure you can then better appreciate his advice to the attendant to use a jack-plane as a much simpler method of getting rid of the skin, which seemed to be the object of the bath.

Time will not allow me to say anything further as to the use of the bath than to advise you, after a cold bath, to use brisk friction with a towel, not only to further cleanse the skin, but to excite the cutaneous circulation, and so draw the oversupply of blood from the internal organs. Those suffering from heart troubles should abstain from the use of the hot bath, as the heat will cause a determination of blood to the surface, and so deprive the heart of its normal supply. Soaps, as you know, are made of fats or oils and soda or potash caustics, according as they are hard or soft. Their efficacy depends upon their power of rendering grease and *debris* soluble in water. Only the best soaps should be used for the toilet, as the cheaper ones are often found to contain deleterious ingredients. In specimens I have examined, by means of the microscope, I have found little particles of bone

and other foreign matter. Of course these will render a soap highly irritating to the skin.

There is a popular error that soap should not be used upon the face. There is no good reason for this belief; in fact, it is more important on the face than elsewhere. Not only is the face the most exposed portion of the body, but there is a greater amount of secretion here than elsewhere on the body to catch the dust.

It has been said that country girls wash their faces and do not have acne. City girls abstain from the use of soap, and do. Though this is exaggerated, I have met with cases that have been aggravated, by neglect of this part of the toilet.

There is an old saying, "Women who paint their faces to seem beautiful do clearly deface the image of their Creator?" and yet they will frequently resort to any means that hold out the least hope of improving their complexions, such as plastering their faces with paste, enameling, binding it in raw beef, and even wearing medicated masks. The purpose of most of these applications is simply to conceal repulsive blemishes, which, in the majority of cases, could be readily removed by appropriate treatment. Such methods can only do harm; for if they do not directly injure the skin, they make it tender, and much more apt to be affected by external agencies. To make their hands white and bloodless, women have been known to spend the night with them suspended by means of pulleys.

I am frequently asked, are dusting powders harmful? Most of them are, for they are liable to contain lead, bismuth, or other deleterious ingredients. Plain starch or magnesia are the least harmful. I advise against the use of any of them, as they will clog up the open-

ings of the glands, and so are apt to prevent the performance of their proper functions. If the face is abnormally greasy, a little sulphate zinc in water and alcohol, as a lotion, will be found of benefit. "Lotions for the toilet" as found in the shops, are liable to contain mercury. This may be absorbed and produce symptoms of constitutional poisoning. What is known as "flake white" is made by mixing carbonate of lead with rose-water. Cases are not infrequently reported of women who have been poisoned, showing symptoms of the constitutional effects of the lead. Some of the symptoms are delirium, abdominal pain, a peculiar drop of the wrist, and a characteristic blue line along the edge of the gum. The study of skin diseases is sadly neglected, though its importance is recognized and exemplified in the vast number of cases reported by even a few specialists. Members of the American Dermatological Association, in 1885, reported sixteen thousand eight hundred and sixty-three cases. Twenty thousand new cases are said to occur in one year among the poor of New York City. Prof. Bulkley, of New York, has published a book of two hundred and fifty pages upon one disease alone, known as "Acne."

I will now give you a few hints upon the treatment of several minor affections of the skin. The little "black-heads," papules, and pustules that frequently appear on the face in young people are best treated in the following manner: The papules and pustules should be opened; the face is then to be bathed in hot water, as hot as can be borne. The black-heads are to be removed by means of a watch key, or squeezed out between the fingers. A powder composed of sulphur, one dram to the ounce of starch, dusted on the face at night will be found of benefit

in some cases. The annoying complaint known as *rosacea*, popularly known as "rum blossom," so called, perhaps, because the majority of cases are not caused by stimulants, is characterized by redness of the nose and cheeks, with dilatation of the blood-vessels. The disease may last indefinitely and cause hypertrophy of the nose, and, in rare cases, it may grow as large as the fist. Its causes are numerous, as digestive disturbances, nervous troubles. Alcohol is only one of many causes. It is more or less common in those subject to sudden changes in temperature, as hack-drivers; it may be aggravated by certain articles of food, as fried articles, tea, coffee, etc.; it is apt to continue indefinitely unless properly treated. Hot water applications will do good in many cases, and a lotion composed of sulphur, fifteen grains, glycerine, one dram, rose-water, one ounce, used several times a day. Operative procedures may be necessary.

Bromidrosis may at times be relieved by means of a dusting powder composed of half a dram of salicylic acid to the ounce of starch, or by means of a lotion of permanganate of potash, a grain or two to the ounce of water. The socks must be soaked in this solution, then dried before being worn.

Discolorations, such as freckles, and so-called "liver spots," should be let alone, for even if they are removed by strong stimulating remedies, the chances are decidedly in favor of their return.

Dandruff is best removed by paying strict attention to cleanliness, removing the scales by means of soap and water, and then by using a stimulating application, such as half an ounce of tincture cantharides to the ounce of bay rum. This is an excellent application for premature baldness.

Itching of the skin, or pruritus, may accompany many different diseases, but it may occur as the sole disorder. Very little can be done in the way of home management for this disease. A weak solution of carbolic acid, a few grains to the ounce, or alkaline baths, composed of a dram of bicarbonate soda to the pint of water, may be tried.

Many of you are familiar with the annoying affliction known as *urticaria*, nettle rash, or hives. It is characterized by the sudden appearance of white or red elevations of the skin, accompanied by the most intense itching. It is caused by gastric disturbances, by the ingestion of certain articles of food in some individuals, such as fish, berries, shell-fish, nervous disturbances, etc. As to treatment, if caused by indigestion, emetics and aperients should be given; locally, vinegar and water, whiskey, alkaline baths, and carbolic-acid lotions, a few grains to the ounce, may relieve the itching.

It is well known that many *dye-stuffs* may cause inflammations of the skin and even constitutional poisoning. Colored stockings have been found to contain poisonous quantities of arsenic and antimony. I have seen many cases of eczema produced in this way in those who are predisposed to the disease, not only from colored stockings, but from the red lining of gloves, hats, and shoes, and colored underclothing. In the latter case they were worn before being washed. The condition of the skin is very similar to that produced by poison oak. The treatment consists in removal of the cause and the application of soothing remedies.

Hair-dyes, as a rule, are harmful. They may not only cause baldness from the lime, lead, or silver which they contain, but the lead may be absorbed and act injuriously on the system. The confidence with which a

bald-headed man will use a hair restorer recommended by a bald-headed barber has been referred to as a sublime example of faith-cure. Read the experience of Tittlebat Titmouse in "Ten Thousand a Year," and I am sure you will hesitate before using hair-dyes.

The Massachusetts State Board of Health has had a large number of so-called hair restorers, now on the market, analyzed. It was found that all that were examined contained lead in varying quantities. Ladies suffering from *hirsuties*, or an abnormal amount of hair, will resort to any means to get rid of this blemish. They usually shave or extract the hairs, but this only acts as a stimulant to renewed growth. So-called depillatories are worse than useless. They contain ingredients that have the power of dissolving the hair; but, if we remember the anatomy of the skin, it is evident that it is impossible for them to reach the papillæ, from which the hair receives its nourishment, without destroying the whole thickness of the skin. The only means by which the hairs can be permanently removed is the method now resorted to by dermatologists, known as electrolysis. A fine needle is inserted into the hair follicle down to the papilla, which is destroyed by the passage of an electric current from the negative pole of a galvanic battery. Five thousand hairs have been removed from a lady's face by this means, resulting in permanent relief of the trouble.

The habit of cutting the hair and wearing a wig is not to be advised, for the advantage derived from the cutting is often more than counterbalanced by depriving the hairs of light and air which are necessary to their healthy growth. I would sum up this whole question by the advice: Keep as clean as possible; remember the aphorism, cleanliness is next to godliness; abstain from the use

of any local application, unless it is absolutely necessary, but on the other hand the injurious use of the bath for the purpose of cleansing the skin may be followed by an irritable and abnormal condition of the cuticle.

In closing my lecture I desire to make a few remarks upon some popular errors in regard to skin disease. The majority are regarded as contagious, and the fear is expressed that those who come in contact with the afflicted are liable to become affected; but this is far from the truth, for out of the hundred or more diseases that may affect this organ, only two or three are really contagious. The laity believe that as a rule cutaneous diseases result from "bad blood," the impurities of which find exit through the skin, and in so doing, take the form of an eruption. Consequently it is harmful to remove them. I have had patients express themselves as very solicitous about the sudden cure of a disease of the skin; the consequence, in their opinion, might be disastrous by the "driving-in" of a disease that might attack some internal organ. Nothing could be more absurd, for it is absolutely impossible in this sense to either "drive in" or "drive out" a skin disease. The blood has little to do with skin diseases. There are diseases as peculiar to this organ as to any other, entirely localized, depending upon changes in the tissue themselves. Others are caused by parasites; still others by nervous disturbances. It is evident that the much lauded "blood purifiers" for cutaneous diseases are, to say the least, useless. A patient may get well while taking these quack nostrums: the fact is then extensively advertised. This is about on a par with the announcement of lottery companies of the fortunate individuals who have obtained prizes; the tens of thousands who are not so fortunate are never heard from.

Negative Aphorisms.

As there are many popular errors in regard to cutaneous diseases that are not confined to the laity, the following aphorisms may be of some interest to the general profession. The statements are made either upon the evidence of well recognized authorities or as a result of my personal experience.

I. You cannot be successful in treating diseases of the skin without a thorough knowledge of general medicine. This, I think, will be accepted as a self-evident proposition.

II. You cannot cure them too quickly.

III. If they are cured they will not act deleteriously upon any internal organ.

Hebra says: "Our warmest endeavors is to find means of terminating these diseases as speedily as possible; were we only in possession of remedies which produce cures thus rapidly, we should have no anxiety with regard to the appearance, from this cause, of mettasis, or of any other consecutive diseases."

IV. Arsenic is not a specific for cutaneous diseases; in fact, it is less frequently used by those who have made a special study of these diseases than by the general profession.

A paper on the value of arsenic in skin diseases, by Dr. G. H. Fox, read before the New York Dermatological Society, April 27, 1886, has called forth a very extensive controversy in regard to the value of the drug in this class of diseases. He condemns the practice of giving arsenic in nearly every form of cutaneous disease as irrational and harmful. Following this paper, Dr. Prince A. Morrow, editor *Journal Cutaneous and Ve-*

neral Diseases, requested the readers of his journal to answer the following questions: 1st—Are you in the habit of using arsenic generally in the treatment of diseases of the skin? 2d—In what form of skin disease is it of superior value to other remedies? 3d—What ill effects, if any, have you observed from its use? 4th—What preparations do you prefer, and in what doses do you employ it?

He has received some forty replies from physicians in various parts of the country. To the first question twelve answered yes; nine, no. The other nineteen made indirect replies, such as "rarely," "generally," "scaly diseases." Answers to the second question included about every disease to which the flesh is heir. One enthusiast answered, "not only generally, but invariably in every case." To the third question, fifteen had met with no ill effect from its use. The others mentioned a variety of symptoms. In answer to the last request, twenty-five used Fowler's solution, exclusively, in from one to fifteen minim doses; six, either Fowler's or Donovan's solutions. Three pinned their faith on arsenious acid alone. One gentlemen gives us a goodly list to pick from. He mentions arsenite potash, arsenite soda, arsenite ammonia, arsenite quinine, DeValgan's, Fowler's, or Donovan's solution, and arsenious acid. I believe this is about all the preparations of arsenic we have. From my individual experience, I can endorse all that has been said by Dr. Fox in regard to the indiscriminate use of the drug. In regard to arsenic, at least, I can almost agree with Dr. Oliver Wendell Holmes, who has said, "If all the medicines in the world were thrown into the sea, it would be better for the men and worse for the fishes." I believe more harm than good has been done from its use.

I seldom prescribe it, except in such cases in which we wish to stimulate the skin, especially the mucous layer, as in psoriasis, pemphigus, and chronic scaly eczema; have never seen the slightest benefit from its administration in any form of acne or alopecia.

V. You cannot drive in or drive out diseases of the skin. "At this day no educated physician believes in employing medicines with a view to either the so-called 'driving out' or 'driving in' of a disease of the skin."—*Hyde*.

VI. The great majority of these diseases, contrary to the general idea, are not contagious; only one or two besides the parasitic diseases out of a hundred and more that may attack this organ.

VII. You should not give arsenic, a stimulant, internally, and use oxide zinc, a sedative, externally, in acute inflammatory diseases. It is to be presumed that those who make use of the drug in this way consider it a sedative to the skin, or, as is more probable, give it "because it is good for skin diseases."

VIII. Psoriasis is not the result of inherited syphilis.

IX. "Non-syphilitic psoriasis of the palms does not exist."—*Fox*.

X. "Freckles" are not always produced by the sun's rays. (See cases reported by Prof. Hebra).

XI. *Tinea Tonsurens* (ring-worm of the scalp) does not occur in adults, though Tilbury Fox has reported one such case. If it ever occurs it is extremely rare. Neither Dulong nor Piffard ever met with a case.

XII. *Tinea Versicolor*, another parasitic disease, does not occur in childhood. "Children are exempt."—*Weyl and Geber*. Neither Dulong nor Living ever saw a case.

XIII. Depilatory remedies cannot permanently remove the hairs without scarring the skin.

XIV. "Pruritus" does not simply mean itching as a symptom; it may refer to an idiopathic disease that is known by that name.

XV. "Bad blood" is not the chief cause of cutaneous diseases; according to most authorities it can hardly be classed as an etiological factor in these diseases.

XVI. Lupus is not due to syphilis.

XVII. Chloasma, "liver spots," is not caused by diseases of the liver.

XVIII. Malaria is not the primary cause of skin diseases, nor are they cureable by means of quinine, though it has been so stated.—*Journal Cutaneous and Venereal Diseases*, January, 1883.

XIX. Scales and crusts are not synonymous terms.

XX. A tubercle is not necessarily larger than a papule; papules of acne are larger than the tubercles of lupus.

XXI. Drug eruptions are not due to "saturation of the system" with the drug; a few grains of iodide of potash may cause an eruption as well as a hundred.

